

What is claimed is as follows:

1. A tubular, flexible, expandable stent having a longitudinal axis, comprising:
a plurality of cylindrical shaped segments, the segment being defined by
a member formed in an undulating pattern of interconnected paired struts and in which
5 adjacent pairs of struts in a given segment are interconnected at opposite ends, the
interconnected ends defining end portions of the paired struts,
the segments aligned on a common longitudinal axis to define a generally
tubular stent body, and adjacent segments connected by a plurality of interconnecting
elements having first and second ends, each interconnecting element extending from an
10 end portion of paired struts on a segment to an end portion of paired struts on an
adjacent segment, the first end of each given interconnecting element displaced
circumferentially from the second end of the given interconnecting element.
2. The stent of claim 1 wherein the first end of each interconnecting element is
longitudinally displaced from the second end of each interconnecting element.
- 15 3. The stent of claim 1 wherein the interconnecting elements are formed of a non-
flexing material.
4. The stent of claim 1 wherein the orientation of the interconnecting elements
reverses between adjacent pairs of adjacent segments along the length of the stent.
5. The stent of claim 1 wherein the interconnecting elements between adjacent
20 segments are of the same length.
6. The stent of claim 1 wherein the interconnecting elements extend at an oblique
angle relative to the longitudinal axis of the stent.
7. The stent of claim 1 wherein the stent includes end segments and intermediate
segments and the end segments of the stent include longer struts than the intermediate
25 segments of the stent.
8. The stent of claim 7 wherein the orientation of the interconnecting elements
reverses between adjacent pairs of adjacent segments along the length of the stent.
9. The stent of claim 1 wherein the material of which it is comprised is metal.
10. The stent of claim 9 wherein the metal is a shape memory alloy.
- 30 11. The stent of claim 9 wherein the stent is a thin-walled tubular member.
12. The stent of claim 1 in a self-expanding configuration.
13. The stent of claim 1 in a mechanically expandable configuration.
14. A tubular, flexible, expandable stent having a longitudinal axis, comprising:

a plurality of cylindrical shaped segments, the segment being defined by a member formed in an undulating pattern of interconnected paired struts and in which adjacent pairs of struts in a given segment are interconnected at opposite ends, the interconnected ends defining end portions of the paired struts,

5 the segments aligned on a common longitudinal axis to define a generally tubular stent body, and adjacent segments connected by a plurality of interconnecting elements having first and second ends, each interconnecting element extending angularly from an end portion of paired struts on a segment to an end portion of paired struts on an adjacent segment, the first end of each given interconnecting element
10 displaced circumferentially from the second end of the given interconnecting element.

15. A tubular, flexible, expandable stent having a longitudinal axis, comprising:

a plurality of cylindrical shaped segments, the segment being defined by a member formed in an undulating pattern of interconnected paired struts and in which adjacent pairs of struts in a given segment are interconnected at opposite ends, the
15 interconnected ends defining end portions of the paired struts,

the segments aligned on a common longitudinal axis to define a generally tubular stent body, and adjacent segments connected by a plurality of interconnecting elements having first and second ends, each interconnecting element extending from an end portion of paired struts on a segment to an end portion of paired struts on an
20 adjacent segment, the first end of each given interconnecting element displaced circumferentially from the second end of the given interconnecting element, the orientation of the interconnecting elements reversed between adjacent pairs of adjacent segments along the length of the stent.

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a2

add c1

ADD
D3

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